Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of assessing whether a human subject is susceptible to type 2 diabetes comprising the step of

determining ~~the allele in the genome of that subject of~~ the SorCS1 cDNA sequence of that subject ~~or SorCS 3 gene~~;

deducing the amino acid sequence encoded by the sequenced cDNA; and

comparing the deduced SorCS1 amino acid sequence with SEQ ID NO:4, wherein a difference in the deduced amino acid sequence relative to SEQ ID NO:4 indicates that the subject is susceptible to developing type 2 diabetes.

2. (currently amended) A method of assessing whether a human subject is susceptible to type 2 diabetes comprising the ~~step~~ steps of ~~analyzing the nucleic acid~~

determining the cDNA sequence of the subject in the SorCS1 ~~or SorCS 3~~ gene; and

comparing the determined SorCS1 cDNA sequence with SEQ ID NO:3, wherein a difference in the determined cDNA sequence relative to SEQ ID NO:3 indicates that the subject is susceptible to developing type 2 diabetes.

3. (currently amended) A method for determining whether a human ~~being~~ is a candidate for developing type 2 diabetes, the method comprising the steps of:

determining the sequence of the protein coding region of the human SorCS1 ~~or SorCS 3~~ gene in the genome of the human ~~being~~;

deducing the amino acid sequence encoded by the region sequenced; and

comparing the deduced amino acid sequence ~~to SEQ ID NO:2 or~~ with SEQ ID NO:4, ~~respectively,~~ wherein a difference in the deduced amino acid sequence observed relative to SEQ ID NO:4 indicates the human ~~being~~ as a candidate for developing type 2 diabetes.

4. (withdrawn) A method for determining whether a human being is a candidate for developing type 2 diabetes, the method comprising the step of:

determining the mRNA or protein expression level of either SorCS 1 or SorCS 3 in the human being wherein the expression in comparison to normal range level of expression established by type 2 diabetes-free individuals indicates that the human being is a candidate for developing diabetes.

5. (withdrawn) A method for identifying an agent that interacts with SORCS 1 protein, the method comprising the steps of:

exposing a SORCS 1 protein to a test agent; and

determining whether the test agent binds to the SORCS 1 protein.

6. (withdrawn) The method of claim 5, wherein the SORCS 1 protein is from a human, a mouse or a rat.

7. (withdrawn) A method for preventing or treating type 2 diabetes in a human being, the method comprising the step of administering neurotensin to the human being in an amount sufficient to prevent or treat type 2 diabetes.

8. (withdrawn) A method for identifying a therapeutic agent, or analog thereof, which is useful for the treatment of type 2 diabetes and related diseases, the method comprising the steps of:

exposing a SORCS 1 protein to a test agent; and

determining whether the test agent modulates the biological activity of SORCS 1 protein.

9. (new) A method of assessing whether a human subject is susceptible to type 2 diabetes comprising the step of

determining the SorCS1b cDNA sequence of that subject;

deducing the amino acid sequence encoded by the cDNA sequenced; and

comparing the deduced SorCS1b amino acid sequence with SEQ ID NO:4, wherein a mutation at residue 52 of the deduced amino acid sequence relative to SEQ ID NO:4 is indicative of the subject's susceptibility to developing type 2 diabetes.

10. (new) The method of Claim 9 wherein the mutation comprises a substitution of a threonine at position 52 of the SorCS1b amino acid sequence.

11. (new) The method of Claim 9 wherein the threonine is substituted with an isoleucine.